

### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: Applicant's arguments filed on 4/8/10 (see pages 8-15) are persuasive to overcome the rejection including the 112, second paragraph rejection.
2. The prior art fails to teach or renders obvious to a plasma etching process including the step of refraining from injecting a high-frequency power into an etching body *via a substrate electrode* in response to an at least approximately ambipolar plasma being present, as the context of claim 1.
3. As to claim 4, the prior art fails to teach or renders obvious to a plasma etching process including the step of existing a fixed, integral ratio between the frequency of the first and the second pulse train.
4. As to claim 7, prior art fails to teach or renders obvious to a plasma etching process including the step of high-frequency pulsed, low-frequency modulated high-frequency power is injected at least temporarily into an etching body via a high-frequency AC voltage, using a substrate electrode.
5. The prior art fails to teach, or even suggest, at least at one time at which an at least approximately ambipolar plasma is present, adding to the plasma an inert gas that is at least one of light and easily ionizable, as required by independent **claim 11**.
6. As to claim 16, the prior art fails to teach or renders obvious to a plasma etching process including the step setting as a plasma pulse frequency an odd-numbered multiple of a frequency of a low-frequency modulation of a high-frequency power

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injected into the etching body via a substrate electrode, and synchronizing the first modulation and the low-frequency modulation with one another so that  $n$  plasma pulses ( $n = 1, 2, 3, \dots$ ) fall in each pulse injected into the etching body using the substrate electrode while  $n + 1$  plasma pulses occur during a pause in an energy injection into the etching body.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (571) 272-1457. The examiner can normally be reached on Mon-Thurs day (7:00-3:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shamim Ahmed  
Primary Examiner  
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SA  
April 11, 2010

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